## FINE SAND A CAUSE OF GREENS TROUBLE

Tropical Turf Tips from the Everglades Experiment Station, Belle Glade, Fla., says: "On most courses we have visited some of the greens must be watered lightly or they become soggy, with the result that they scald under a hot sun and are readily attacked by fungus diseases. A core of sod from such greens will usually show good root growth only in the upper 2 inches and no roots at all below 4. A really healthy green should have fine roots down to 12 inches.
"Slow absorption of water by the soil is a measure of poor soil structure, improper aeration and adverse conditions for healthy root growth. 'Over-watering is virtually impossible where adequate drainage is built into a green,' according to Fred V. Grau, Director of the USGA Green Section.
"Too often fine sand has been used in the construction and topdressing of greens. Later as organic matter decomposes in the sod, organic acids are formed which cement the fine particles of sand to form a tight layer which neither water nor roots can penetrate. Air space between the soil particles is very important for grass roots. Unless air is present in the soil in about equal proportions with water, the roots fail
to absorb nutrients, even in fertile soil, and root growth is stopped. Even on a properly constructed green the drainage can be ruined by a topdressing of marl, which forms a water-tight layer at once."
"Use coarse sand!" Timely Turf Topics for November, 1946, suggests that Builders' sand (used in cement) has been found to have the desirable characteristics for golf course construction and maintenance.

Grau says the small proportion of fine sand in Builders' sand is not objectionable but that material larger than $.185^{\prime \prime}$ should be removed by screening.

## WET EARLY SEASON HAS COMPACTED SOILS

There is an extreme possibility that serious trouble will develop this year on many fairways throughout the country due to the heavy rainfall that has been prevalent. The superintendent has been unable to mow as frequently as has been necessary and, when mowing has been accomplished, serious soil compaction has resulted.

There is a likelihood because of this increased soil compaction that Poa annua will increase on these fairways due to its habit of growth and of being able to thrive on heavy soils.


Very restricted root systems can be expected where this condition exists and every effort should be made to aerate the soils of your fairways before the hot days of summer approach. There is a possibility also that if a hot, dry season occurs in the early days of summer many of the grasses existing on these fairways will be killed or severely damaged.

Once these heavily compacted soils become dry, water penetration will almost be impossible and serious surface runoff will result. This will also encourage shallow rooting systems and thus increase the susceptibility of the grass to drought. Aeration of the turf in one form or another will loosen its compacted condition and permit better penetration and utilization of normal rainfall.

This condition also will be prevalent on restricted areas such as tees and putting greens because of the heavy concentration of foot traffic. Aeration and cultivation of these areas is essential in order to afford deeper root penetration.

Careful use of irrigation systems will be essential this summer to encourage deeper root systems.
-Timely Turf Topics

## MASS. GOVERNOR VISITS SPALDING PLANT

A. G. Spalding \& Bros. was honored with a special inspection of their Willimansett, Mass. plant when Gov. Robert F. Bradford, of Mass., visited the Springfield district recently.

Accompanying the Governor were Lt.

Gov. Alfred W. Coolidge and eight of the nine members of the Governor's Counsel. It was rumored that the missing member was fishing in Maine.

A golfer himself, Gov. Bradford showed great interest in the various items of sports equipment manufactured at this Spalding plant.

At the completion of the tour, Spalding vice president W. T. Brown presented the Governor with a matched set of Spalding "Registered" golf clubs and each of his party with a dozen Spalding "Dots."

## WILSON EMPLOYEES IN FACTORY IDEA CAMPAIGN

A new emplooyee suggestion plan entitled "It Pays to be a Schemer" soon will be presented to all Wilson Sporting Goods factories. Under the direction of Fred Bowman, VP and GM, and administered by his personnel aides Ken McCormac and Wes Johnston, the program will present a prize list including a minimum of $\$ 5$ for each suggestion accepted. This stipend can extend up to $10 \%$ of the estimated annual first year's net savings to the company derived from any idea.

There is no limit on the type of suggestions contributed and the opportunity is open to every employee in every factory. Naturally, the idea is to contribute superior production methods, but these can extend into any phase from sweeping the floor to the finest precision operation. A Suggestion Committee will be appointed to run the show in each factory and will set up a mode of operation.


Gov. Bradford of Massachusetts is shown new woods by John Morin, pres., Spalding's employees' union. Big Bill Brown, Spalding, v.p., Sen. Barry, Spalding's Frank Williamson, Jerry Douglas and Jim Long and members of the governor's staff are among those present.


## Convenience and Beauty In New Scorecards

During the war, all of us heard and read about the many wonderful "postwar" products that were going to be ours as soon as victory was won. There were streamline trains, streamline cars, streamline houses, gadgets of all sorts, that would do most anything just by pressing a button. Few of these have now become realities . . . most of them are still ideas in the minds of designers. But, thanks to Golf Chairman Carl Larson, and one of America's foremost industrial designers, George Wales, the Park of Buffalo now has for their members and guests its new postwar score card.

Actually, it is more than one score card. As you will see from the accompanying illustration, through "bleed" photographs on the front cover of the new score cards, have been introduced beautiful photographs taken of the Park club. These photographs show different scenic views of the Park club which many members and guests have carried away mentally, which can now be shown to friends and acquaintances of other clubs visually. This in itself is unusual and well worthy of other clubs' consideration because of the unique advertising value that it gives the club.

In addition to the photos the card has other unusual advantages. It is nearly 50 per cent larger than the average score card. The majority of score cards are 4 -page affairs, folded in half, consisting of the name of the club on the front cover, place for scores on inside pages 2 and 3 with local rules on back cover. The Park club's score card unfolded is approximately $31 / 4$ by 14 inches. That may seem to be ungainly, as it undoubtedly is, but folded twice it results in a handy pocket size $31 / 4$ by $41 / 2$ inches. This size fits nicely into the back pocket without folding. This results actually in a 6 -page card. The front cover being the bleed photograph pictures
with the name of the club, 2 and 3 , score keeping pages,-page 4 being for scores which must be properly attested and turned in for club records.-page 5 bears the suggestion:

> "Say Golfer-Don't Look Now, But behind How about letting that group bo open hole ahead?"

This page always pops up at every hole when the scorekeeper is writing the score and is therefore always before one member of each foursome. Page 6 is printed in 3 colors. There are the club's rules in red ink,-the U.S.G.A. rules are printed in green ink and other rules are printed in black ink. The card is printed on excellent stock which is glossy on the outside, thus reproducing very beautiful photographs while the inside surface readily lends itself to pencil marking.

The card itself has everything any golfer or any match would desire. It is printed in 3 colors: black for the holes, yardage and strokes; red for the par, the name of the player and such other scoring data, such as "syndicates" and "dogmeats." All ruling, both horizontal and vertical for the proper score card is in green.

As an added convenience to the scorekeeper, there is provided a small box for each hole, for each player, which can be so marked for strokes to be given by players either in twosome or foursome. This, as you know, has always been inconvenient on most cards, but on designer Wales' card this has been provided for easy use.
As an additional convenience, the card is so designed so that it can be used by twosomes, threesomes and foursomes. For the first horizontal line is provided for player "A," the second for player "B" while the third horizontal line is left blank. Thereby, providing a place for a match between either

This is the scenic and instruction side of the Park club's new scorecard.

" A " and " B " while playing in a twosome or a foursome. The same is true for players "C" and "D." In addition there is one horizontal line that can be used for foursome match score tabulation. It would seem from all this that the card is overcrowded, but actually, because of its modern typography, it is just the opposite.

Because it is a golfer's habit to usually play for something, designer Wales has taken that into consideration. For, on the card itself is provided a place for syndicates for each hole and each player. Also, at the Park club it is a habit for majority of the players to play what is commonly known as "dogmeat." This in other words, means the person nearest the "pin" off the tee on the par 3 holes. And, on the Park club card a special place for each one of the par 3 holes and each one of the players is provided so that this bet or wager is conveniently scored.
As at all clubs, most Park club members are inclined to neglect turning in properly attested scores. On this new Park club card this is taken care of by providing an extra page on the card which provides for attested scores properly dated by any of the players to be torn off and left with handicapper.

Then, so that there will be no putts conceded, immediately below space for attesting the score, is printed very prominently in red ink, so that it immediately attracts the attention of anyone signing the card, the following:

$$
\begin{aligned}
& \text { "Club Rule No. 1-No player has } \\
& \text { the right, privilege or authority to } \\
& \text { concede any putt or any other ad- } \\
& \text { vantage to himself or any other } \\
& \text { players whose score is to be entered } \\
& \text { in the handicap or event records of } \\
& \text { the Club. } \\
& \text { "DO NOT ATTEST TO A } \\
& \text { SCORE WHICH VIOLATES } \\
& \text { THIS RULE." }
\end{aligned}
$$

Wouldn't many golfers and clubs be better off with such an enforced rule?
In addition, the card has been properly die cut so that it is handy to insert thru 2 slits a pencil for scorekeeping purposes.

To show the thoughtfulness of the Park
club's members, special score cards have been designed for inter-club matches. Home-to-home matches are played with Mississauga G\&CC, Torondo, Can., and the Park club. For this home-to-home match at the Park club, individual score cards have been provided; on page 4 is printed the Mississauga Indian in red and black ink as well as the following invitation: "Guest card -Mississauga member. To you _ Mississaugandian we exend a warm welcome and a key to our club. May your visit be most enjoyable and your golf superlative. Cordially yours,-Park Country Club." And then printed in red is the following: "Come back often and bring your squaw."

## GOOD TEES

## (Continued from page 49)

QUESTION: What kind of bent have you on your tees?

BOOTERBAUGH: We have the old original strain of Washington bent that came from the Green Section. They tell me it came in a piece 30 inches square and all mouldy, and they didn't know whether to throw it in the garbage can or try to do something with it. They started it in rows and that was the bent that was on the old original golf course, and I think it is probably about 20 years old now. When the course was remodeled they took the turf off the old greens and sodded the present tees which we are maintaining now.

QUESTION: You say you water your greens on Mondays and Fridays and you also cut them on Mondays and Fridays. I would like to know how you do that.

MR. BOOTERBAUGH: We always send two men out cutting tees and they have these big, old, war-horse mowers, and if I have a man free, I have him follow and put out the sprinkler. If I don't have a man free, the tee cutter sets the sprinkler out as soon as he is through cutting, and gets them started. If I have 2 men cutting and they can set out the sprinklers, one man

Here's the writing side of the scorecard Buffalo's Park club now is using.



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doesn't have to worry about them for a few hours, until ten o'clock or so, when he worries about a change on them. If they run 3 or 4 hours we don't worry, either. We figure on at least two-and-a-half hours.

Al Linkogel, Westwood CC, St. Louis, Mo., after his address on "Tee Maintenance on Private Courses" remarked: In establishment of Zoysia, I don't think you have to worry about crabgrass. I haven't. That was one reason I put it on Number 8 tee. It was down low in the valley and there was very little irrigation and I couldn't keep bent and bluegrass there, and that is one reason why I put Zoysia on that tee. You can never see a spear of crabgrass on Zoysia. It is thick all around it but not on the Zoysia and that is one reason I am so enthused about it.

QUESTION: If Zoysia is a slow-grower, wouldn't that be a disadvantage in putting it on a one-shotter and filling in the divots?

LINKOGEL: No, I also have it on one of our shortest holes. It is 125 yards, a par-3 hole, and they don't take very many divots out of Zoysia grass after it is once established, and with very little care you keep a pretty good tee on your short holes, and this tee of mine is not any too large.

QUESTION: I am under the impression that Zoysia produces a deep mat. Is that not objectionable to the stance of the golfer on a tee?

LINKOGEL: If you cut it too long it will produce a pretty heavy mat, but you want to cut it short because it will stand a short cutting, and you want to keep it cut down short.

At GSA convention

## CLUB "HOLDS THE LINE"

Fort Wayne CC Cited by Newspaper as Island in Inflation Sea
Ft. Wayne (Ind.) CC is possibly the best publicized country club in the world. Sec.mgr. Carl J. Suedoff sees to that. Latest of the smartly-angled stories of such general interest they make good reading in Ft. Wayne newspapers is one on the club holding to the pre-war line of initiation fees and dues.

The piece by Ray L. Scherer in the Ft. Wayne Journal-Gazette reads:
"These days when a nickel beer takes a dime and a five thousand dollar house goes for nine, maybe ten, it's time to ring bells when something pops up that costs the same as it did back in 1940 before the dollar climbed on an escalator.
"There is one of those things in Fort Wayne. There's a catch in it, though-not
everybody can buy it. At least not as many as would like.
"You, the citizen, may not be hugely impressed to learn that annual dues at the Fort Wayne Country Club has remained at a prewar $\$ 125$ per year. Or that the membership fee is still pegged at $\$ 100$.

## Clubs of "Best" People

"It may, however, tickle your civic pride to know that the club's dues are, dollar for dollar, the lowest in the Middle West. Have a look at what other leading country clubs charge. As far as possible the list is confined to comparable clubs-the clubs to which the so-called "best people" belong.
"Dues are $\$ 312.50$ for the year at the Milwaukee Country Club. South Bend charges $\$ 162$. The Louisville Country Club nets $\$ 180$ each year per family. The figure is $\$ 206$ for the Portage Country Club near Akron. Closest to the Fort Wayne dues is the $\$ 150$ annual fee for the Evansville Country Club. Tax is additional.
"Others are Columbus, (O.) Country Club, \$206; Cincinnati Club, \$250; Sunset Ridge Country Club, Winnetka, II1., $\$ 324$; and Highland Golf and Country Club, Indianapolis, \$240.
"Most of these clubs harpoon members extra fees for dances, use of the pool and other social gimeracks; $\$ 125$ at the Fort Wayne establishment covers all these extras.

## "Junior Family" Dues

"Junior family dues (man and wife under 30) are $\$ 80$. This also includes the kids who spend most of their Summer splashing in the pool at the local club. Three lifeguards have little time for flexing muscles in the sun.
"Astute management has permitted various improvements at the club. And all without assessment. The grill underwent a general face-lifting recently. There is a $\$ 22,000$ watering system which soaks the fairways every night. The pool cost $\$ 18,000$. The annual upkeep bill runs more than $\$ 35,000$. The club pays Federal taxes of nearly $\$ 15,000$ annualy.

Meals start at $\$ 1.75$. Members may nibble on a steak for two dollars and a half. Industrialists who bring out-of-town bigwigs to the club for an evening on the town never apologize for the cuisine.
"Since Fort Wayne has no city club-like Indianapolis' Columbia Club or Athletic Club-local executives usually trot their guests out west to the FWCC when they want to talk about pumps or pistons or silk hose.
"Quest, Rotary and the Executives Club use the country club in lieu of a downtown watering place. It's no secret that the powers behind the country club will be delighted to unload some of their hosting on an uptown caravansery-like, say South Bend's University Club.
"In 1940 Life magazine found the FWCC 'not the greatest or the least of American country club . . . but typical of most.' Today Life would find it unchanged. Some of the boys who took the girls home in station wagons or shiny roadsters with the tops down' did not come back from the wars and all of the pretty girls in Life's layout are married.
"But the membership roster of some 400 families is still closed. There's still a waiting list of at least 60 . Vacancies spring up rarely -somebody dies or moves from Fort Wayne. New members must still pass muster before the board and membership committee, must be considered 'acceptable.'
"Lest you be carried away with the small potatoes it costs to carry a membership card in Fort Wayne's plushiest country club, there's hardly a member who hasn't nudged the gentleman sitting next to him somewhere around the 19th hole and confided, 'You know, it not the $\$ 125$ cost that gets me, it's the upkeep . . ." $"$

NEED SUPPLIES? SEE PAGE 85

## GOLF PROS

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# Machine Maintenance Has Its Architectural Limitations 

By WILLIAM B. LANGFORD

Golf course architecture is primarily the science and art of arranging a closed circuit of 18 holes: First, to bring out the most interesting and testing combinations of terrain and length from a playing standpoint; and, second, to produce a layout which can be economically built and maintained.

Considerations besides interest and economy, such as clubhouse location, beauty, flexibility, balance, congestion, soil, etc., are important, but no one factor can dominate the development. Above all, the course must be as fine a test as natural conditions plus artificial creations permit, even economy playing second fiddle to character.

Some features which add immeasurably to playing excellence are greenkeepers' headaches, yet if our enjoyment is sufficiently enhanced by them and our game so tested that we acquire new strokes or greater proficiency in the old ones, the extra cost and greenkeeping annoyance of these bugaboos is justified.

Certainly economy and operational ease must always be carefully considered, but if we are to get any kick out of the game and if we wish to improve, we must occasionally, especially around and on the green, tolerate features which are expensive and comparatively difficult to construct and keep up.
The unexpected is always happening in golf, and the course should not monotonously repeat humdrum mediocrity; it must augment the life and variety of the game it fosters to be right.

## What Limit to Economy?

Increased labor costs and frozen budgets have put the accent on machine maintenance
of golf courses for the past several years. From this trend one might imagine that the ideal course would be that on which no hand maintenance would be required. Further along that line of thought the ideal course for maintenance might be a park that could be mowed quickly, and with greens, traps and tees that would be easily handled by motorized equipment.

Nature doesn't do that, and nature is the governing power in golf course architecture. The architect always is looking for opportunities to provide tests of golf that appear to have been made by nature. The magnificent tests of the Scotch links are mainly natural, with man's work being at its best when it deftly accents the natural features.

The talk about having a course completely machine maintained definitely has a tendency toward nullifying part of the genius of the greenkeeper. Astute training and management of labor is a quality which identifies a master of the greenkeeping profession. If golf architecture's ideal is to be made something on the park order then a distinguishing quality of the expert greenkeeper is going to be lost.

## Psychology An Essential

This year with golf balls again available the rough has returned and with fewer complaints, apparently, from private club members than from the tournament pros. Rough is a hazard and one of the best and most testing of hazards if properly located. The main argument against rough is one that applies to public and daily fee courses; that of possibly delaying play. As the pay-asyou play courses try to approach the private


This group at the Tifton, Ga., turf conference gave the unique problems of southern course maintenance and turf research an intensive going-over.

Noer photo
club standard of architecture the rough is bound to increase as a hazard to be avoided by calculated shot-making.

One of the psychological features of good golf course architecture is that of making a hole look easy but play hard, or vice versa. This is an element that may not lend itself to machine maintenance. Handwork on traps of interesting design and strategically placed may be absolutely necessary.

There has been much loose talk about making golf easier for the high handicap player who pays most of the bills at the private clubs. It has been seen frequently that the course can be eased to the extent that it loses attractive character. The member, even if he has trouble breaking 100 , perfers to play a course that has a reputation as being a real test. There he knows he has earned his score.

For some years the average age of private club members is going to decline. Now the average age probably is slightly over 50 . In another 10 years the average age of private club members probably will be around 40. That's something to be considered by the architect. Right now one of the problems of layout at many clubs is steep climbs which are none too good for aging members with heart trouble.

But such problems of design that are governed by the age factor are matters mainly of new construction. Right now the alterations (as well as new construction) are governed too much by the machine maintenance factor rather than by the strictly golf elements.

The green chairman and greenkeeper may be tempted by possibilities of reducing maintenance costs by architectural revisions but they'd better get competent architectural advice before they ruin a hole so it will be more agreeable to a machine than to a player.


Announcement by Mueller Brass Co., Port Huron, Mich., of their new "Streamline" tee markers is bringing a lively response from golf course management men. The new markers are of solid brass, in plain brass or painted finish carrying numerals from 1 to 18. Tee Marker has 7 in. top diameter ; pin length is 5 in . Prices and complete particulars may be had direct from the manufacturer.

Miami Country club luncheon, and maybe the presence of Mile. Holmes, queen of the Florida florists' show, accounted for cheerful looks of Florida supts. at their first annual conference.



Sam Byrd, pro at Detroit's Plum Hollow, kids the amateur "pros" who volunteer shot-making advice by supplying them with these "teaching permit" cards. The card is a clever little stunt for getting the pupils coming to Sam for expert instruction.

## SWINGING AROUND GOLF

(Continued from page 21)
assistant pros. . . Club Managers Assn. of America now has 18 regional chapters and more are organizing.

Harry Thompson, mgr., Bloomfield Hills (Mich.) CC is only golf club representative
in charter member list of the 25 Year club. . . The 25 Year club consists of managers who have served the same club as managers for 25 years or more. . . Any golf club manager eligible is asked to write Jesse G. Wetzel, mgr., Detroit (Mich.) club.

Clear Lake CC, $\$ 3,000,000$ plant near Seabrook, Tex., with golf course by Wm. Robertson, will open soon: . . Evanston (Ill.) GC Fairways contains story by Waldo Thorsen saying that of 1400 different birds about 266 have been recorded on Chicago district courses. . . Wm. Cook is new mgr., Beechmont CC, Cleveland, O. . . . Glenn Marty signed as mgr. by Lakeside CC, Bloomington, Ill.

Joseph Becker, new mgr. at Plum Hollow GC (Detroit dist.), where 1947 PGA will be played, is an experienced hand at caring for tournaments. . . He formerly was mgr. at Inverness club, Toledo, O. . . Madison, Wis., Monona 9 -hole muny course had 62,0009 -hole rounds played on it last year. . . George Calderwood, North Hills CC (Milwaukee dist.) elected pres., Wisconsin PGA.

Sam Kennedy, a 58-year-old, former footballer and boxer and at present running a pub, borrowed a set of clubs and


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